

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method comprising:
passing data through a reconfigurable partial response encoder to create a spectral notch
at a frequency other than DC; and
transmitting data output from the reconfigurable partial response encoder at baseband, the
data output from the reconfigurable partial response encoder exhibiting the spectral notch; and
modifying a clock frequency of the reconfigurable partial response encoder to tune the
spectral notch.
~~modifying a characteristic of the reconfigurable partial response encoder to change a~~
~~frequency characteristic of the spectral notch.~~
2. (Original) The method of claim 1 further comprising pre-coding the data prior to passing
through the reconfigurable partial response encoder.
3. (Original) The method of claim 2 further comprising passing the data through a spectral
whitening encoder.
4. (Canceled)
5. (Currently Amended) A method comprising:
detecting errors in a data stream received over a wireless link; and
modifying characteristics of a partial response encoder in a digital data port to reduce the
errors, wherein modifying characteristics comprises modifying a clock frequency at which the
partial response encoder operates to modify a spectral location of a spectral notch exhibited by
baseband data transmitted by the digital data port.
- 6-8. (Canceled)

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9. (Currently Amended) An apparatus comprising:
a digital data port to transmit baseband digital data, the digital data port having a
reconfigurable partial response encoder to encode the baseband digital data such that when
transmitted, the baseband digital data exhibits and create a spectral notch in the region of a
wireless frequency band;
a wireless interface that operates in the wireless frequency band; and
a circuit to modify a clock frequency of the reconfigurable partial response encoder to
move the spectral notch in frequency relative to the wireless frequency band.
10. (Original) The apparatus of claim 9 wherein the spectral notch is between about 800 MHz
and about 900 MHz.
11. (Currently Amended) The apparatus of claim 9 wherein the digital data port further
~~comprising~~ comprises a low pass filter to reduce spectral energy in wireless frequency bands
above the spectral notch.
12. (Original) The apparatus of claim 9 wherein the reconfigurable partial response encoder
implements $1-D^4$.
13. (Original) The apparatus of claim 12 wherein the reconfigurable partial response encoder
operates at a clock frequency of approximately 3.4 GHz.
14. (Original) The apparatus of claim 9 wherein the reconfigurable partial response encoder
implements $1-D^2$.
15. (Original) The apparatus of claim 9 wherein the reconfigurable partial response encoder
implements $1+D$.
16. (Original) The apparatus of claim 9 wherein the wireless frequency band corresponds to
global positioning system (GPS) signals.

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17. (Original) The apparatus of claim 9 wherein the wireless frequency band corresponds to cellular phone signals.
18. (Original) The apparatus of claim 9 wherein the wireless frequency band corresponds to wireless local area network (WLAN) signals.
19. (Currently Amended) An apparatus comprising:
a wireless interface circuit; ~~and~~
a digital interface circuit that includes a partial response encoder to create a spectral notch at a non-zero frequency in transmitted baseband digital data; and
an adaptive circuit to measure errors in data received by the wireless interface circuit and to modify a clock frequency of the partial response encoder to tune the spectral notch.
20. (Original) The apparatus of claim 19 wherein the spectral notch is near in frequency to a frequency of operation of the wireless interface circuit.
21. (Original) The apparatus of claim 19 wherein the partial response encoder implements $1 - D^4$.
22. (Original) The apparatus of claim 19 wherein the digital interface circuit further comprises a pre-coder to obviate a need for memory in a receiver.
23. (Original) The apparatus of claim 19 wherein the wireless interface circuit comprises a global positioning system (GPS) receiver.
24. (Original) The apparatus of claim 19 wherein the wireless interface circuit comprises a cellular phone interface.

25. (Original) The apparatus of claim 19 wherein the wireless interface circuit comprises a wireless local area network interface.
26. (Currently Amended) An electronic system comprising:
a first integrated circuit including a wireless interface circuit and a digital data port to transmit baseband digital data, the digital data port including with a partial response encoder to mitigate interference to the wireless interface circuit, wherein the partial response encoder encodes the baseband digital data such that when transmitted, the baseband digital data exhibits a spectral notch at a non-zero frequency, the first integrated circuit comprising an adaptive circuit to measure errors in data received by the wireless interface circuit and to modify a clock frequency of the partial response encoder to tune the spectral notch;
a second integrated circuit in digital communication with the digital data port of the first integrated circuit; and
an omni-directional antenna coupled to the wireless interface circuit of the first integrated circuit.
27. (Original) The electronic system of claim 26 wherein the wireless interface circuit comprises an apparatus to operate between about 800 MHz and about 900 MHz.
28. (Original) The electronic system of claim 26 wherein the wireless interface circuit comprises an apparatus to operate between about 2.4 GHz and about 2.5 GHz.
29. (Original) The electronic system of claim 26 wherein the partial response encoder includes a filter to implement 1-D⁴.
30. (Canceled)